

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Patent Application of:	)	Confirmation No.: 2393
	)	
Paul J. RANK et al.	)	Group Art Unit: 2176
	)	
Application No.: 09/774,354	)	Examiner: Maikhanh NGUYEN
	)	
Filed: January 30, 2001	)	
	)	
For: METHOD AND APPARATUS FOR	)	
FORMULA EVALUATION IN	)	
SPREADSHEETS ON SMALL	)	
DEVICES	)	

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL OF APPELLANTS' BRIEF ON APPEAL**

Dear Sir:

In response to the Notification of Non-Compliant Appeal Brief mailed February 23, 2007, Appellants resubmit, in triplicate, Appellants' Brief on Appeal under 37 C.F.R. § 1.192 in support of the Notice of Appeal filed on March 23, 2006. Appellants previously submitted a check in the amount of \$500 for the appeal brief fee as required by 37 C.F.R. § 41.20(b)(2).

The Commissioner is hereby authorized to credit overpayments or to charge any deficiency in a required fee to Deposit Account No. 19-3140.

Respectfully submitted,

Dated: March 23, 2007

By:



A. Wesley Ferrebee, Reg. No. 51,312

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Attorney Docket No. 30014200-1080

PATENT

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**APPELLANTS' BRIEF ON APPEAL**

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellants submit this Brief in support of the Appeal for the above-referenced application.

**I. REAL PARTY IN INTEREST**

The real party in interest in the present appeal is the Assignee, Sun Microsystems, a U.S. corporation. The Assignment was recorded in the U.S. Patent and Trademark Office.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals and no related interferences.

**III. STATUS OF CLAIMS**

Claims 1-18 are pending in the above-identified application. Claims 1-18 were rejected in the Final Office Action dated November 23, 2005. The rejection of claims 1-18 is appealed.

**IV. STATUS OF AMENDMENTS**

A Response After Final was filed on February 23, 2005, wherein no amendments of the claims were made. An Advisory Action was mailed March 13, 2006, stating that the Response After Final had been considered but rejected because the Response did not place the application in condition for allowance.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

Embodiments consistent with the present invention generally relate to a method and computer program product for enabling spreadsheet programs with formula support on small devices while minimizing the amount of memory space required by the program. Conduit software gathers the needed formulas, evaluates them, and generates compiled code for the small device to understand. The evaluation is performed as part of the conversion step. See page 12, line 10 to page 13, line 3 of the patent application.

Independent claim 1 is directed to a method in a data processing system for evaluating a spreadsheet file. See page 16, line 9 to page 17, line 2 of the patent application. A spreadsheet file is obtained in a first format on a first device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. The spreadsheet file is converted to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format. See page 12, line

10 to page 13, line 3; page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Then, the spreadsheet file is transferred to a second device. See page 18, 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application.

Independent claim 10 is directed to a computer program product comprising a computer-readable medium having computer-readable program code to evaluate a spreadsheet file. See page 16, line 9 to page 17, line 2, and page 19, lines 6-11 of the patent application. Computer-readable code causes a computer to obtain a spreadsheet file in a first format on a first device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Computer-readable code then causes the computer to convert the spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format. See page 12, line 10 to page 13, line 3; page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Computer-readable code then causes the computer to transfer the spreadsheet file to a second device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application.

## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to be reviewed on Appeal are whether claims 1-4 and 10-13 are properly rejected under 35 U.S.C. § 103(a) as unpatentable over *Horie et al.* (U.S. Patent 6,487,597, hereinafter "*Horie*") in view of *Schlaflly* (U.S. Patent 5,471,612), and whether claims 5-9 and 14-18 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over *Horie* in view of *Schlaflly*, and further in view of *Pajokowski et al.* (U.S. Patent 6,718,425).

## VII. ARGUMENT

To render a claim unpatenable under 35 U.S.C. § 103(a), the Examiner bears the burden of establishing a *prima facie* case of obviousness. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972). In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. *See* MPEP 2143.03, *citing In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In the present application, the cited prior art fails to teach or suggest all of the limitations of any of pending claims 1-18. Thus, the Examiner has failed to established a *prima facie* case of obviousness for any of pending claims 1-18. Accordingly, the rejection of claims 1-18 should be reversed.

Furthermore, *prima facie* obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *See* MPEP 2143.01, *citing In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In the present application, a motivation or suggestion to combine the references as suggested has not been established. Accordingly, for this reason also, the rejection of claims 1-18 should be reversed.

### A. The Combined References Fail To Teach Every Limitation of Claims 1-18

#### 1. *Horie* and *Schlaflly* Do Not Teach Evaluating While Converting

Applicants respectfully submit that the combination of *Horie* and *Schlaflly* fails to teach or suggest“converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file **while**

converting said spreadsheet file to said second format' (emphasis added), as recited in claim 1.

Claim 10 recites a similar limitation. Applicants note the *Schlaflly* specifically teaches away from this limitation. *Schlaflly* states:

Before meaningful results of a given spreadsheet may be presented to a user, the formulas of a given spreadsheet must first be evaluated or recalculated. "Recalculation" is the process by which a spreadsheet's cells, particularly formula-storing ones, are evaluated to express values. Different recalculation orders are well known including, for instance, natural, rowwise, and columnwise. Each will be reviewed in turn.

See column 2, lines 60-67 of *Schlaflly*. *Schlaflly* further states:

The present invention comprises an electronic spreadsheet system having a preferred interface and methods for compiling spreadsheet formulas into native machine instructions. The system includes a Formula Evaluator for compiling a given spreadsheet formula into a machine language sequence to be executed by the target processor/coprocessor. In this manner, the system may perform recalculation of spreadsheet formulas in substantially less time than is required by prior art, token-based interpreter systems.

See column 4, lines 1-10 of *Schlaflly*. Thus, *Schlaflly* indicates that formula evaluation is performed after compilation or conversion. By converting the formula prior to evaluation, evaluation or recalculation may be performed more quickly. Accordingly, *Schlaflly* does not teach or suggest converting while evaluating.

Moreover, *Horie* also fails to teach or suggest the "while" limitation. The Examiner relies on column 7, lines 27-30, which state:

the user can easily convert a file form to a new one (for example, from a word processor data containing format information into text data containing no such information) and transmit it to the PDA.

Nowhere does *Horie* suggest that anything other than conversion is performed during the conversion process. Thus, *Horie* also cannot be relied upon to teach or suggest that formula evaluation is performed while converting the spreadsheet file.

## 2. The Examiner Fails to Rebut Applicants' Arguments

In response to Applicants' arguments, the Examiner has contended that the combination of *Horie* and *Schlaflly* meets the limitations of claim 1, without citing to any portion of *Horie* or *Schlaflly* that teaches or suggests evaluating formulas **while** converting a spreadsheet file. The combined references must teach or suggest every limitation of the claims. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The combined references fail to teach the contemporaneous evaluation of formulas and conversion of a spreadsheet file, as required by the word "while" in the claim. Moreover, it would not have been obvious to perform these acts contemporaneously to solve the problem at hand, as evidenced, for example, by the long-felt need described in the patent application, as discussed below. See page 8, ll. 6-14 of the patent application.

Applicants reiterated this traversal in the Response filed February 23, 2006. However, the Examiner still failed to answer the substance of the traversal in the Advisory Action. The Examiner has repeatedly failed to establish that the combination of *Horie* or *Schlaflly* teaches or suggests "converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file **while** converting said spreadsheet file to said second format" (emphasis added).

Claim 10 is patentable over *Horie* in view of *Schlaflly* for at least the same reasons that claim 1 is patentable over *Horie* in view of *Schlaflly*. Claims 2-4 and 11-13 depend upon claims 1 and 10 respectively and are also therefore not unpatentable. The rejection of claims 5-9 and 14-18 relies on the propriety of the rejection of claims 1 and 10, respectively. As previously explained, those rejections are erroneous. Furthermore, *Pajkowski* fails to teach or suggest the



limitations absent from *Horie* and *Schlaflly*. Accordingly, the cited reference, alone or in combination, fail to teach or suggest every limitation of the claims, and *prima facie* obviousness has not been established.

B. There Is No Motivation To Combine the Cited References

1. The Proposed Combination Would Not Be Obvious

Applicants respectfully submit there is no motivation to combine *Horie* and *Schlaflly* as the Examiner has proposed to modify the references. “In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). *Horie* in no way addresses the evaluation of formulas, and *Schlaflly* in no way discusses transferring spreadsheet files to a device. Thus, there is no motivation to combine the references found within the references themselves, as one of ordinary skill in the art with the references before him would not be sufficiently enabled to combine the references as proposed by the Examiner.

Moreover, motivation would not be found in the knowledge of one of ordinary skill in the art, as evidenced by the long-felt need for methods and systems consistent with the present invention. See page 8, ll. 6-14 of the patent application. Neither *Horie* nor *Schlaflly* addresses the nature of a problem solved by embodiments consistent with the present invention, namely the reduction of memory required by a spreadsheet file when transferred to a device such as a PDA. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Thus, one of ordinary skill in the art would not be motivated to modify *Horie* with *Schlaflly* as proposed by the Examiner.

2. Desirability of the Proposed Combination is not Suggested

Still further, the Examiner contends that the motivation to combine is found in the increased speed of transmission of the spreadsheet from the personal computer to the PDA. This contention is illogical, however, as the evaluation of formulas during conversion and transmission would require more computation and add more data to the file being transmitted, thus slowing the speed of transmission. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP 2143.01 (Emphasis original), *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). *Horie* fails to provide the requisite desirability for the proposed modification.

3. *Schlaflly* Teaches Away

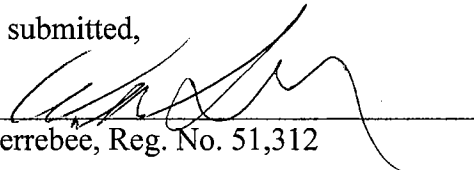
Moreover, *Schlaflly* teaches away from the limitations of claim 1. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). As previously stated, in *Schlaflly* the formula is converted or compiled before the formula is evaluated. Clearly, *Schlaflly* indicates that the conversion is performed before the formula can be evaluated. Thus, the Examiner’s combination of *Horie* and *Schlaflly* to teach conversion of a spreadsheet file while executing a formula is improper.

**VII. Conclusion**

Applicants respectfully submit that the outstanding rejections should be reversed, and that the application is in condition for allowance.

Respectfully submitted,

Dated: March 23, 2007

By:   
A. Wesley Ferree, Reg. No. 51,312

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**CLAIMS APPENDIX**

1. (Previously Presented) A method in a data processing system for evaluating a spreadsheet file comprising:
  - obtaining said spreadsheet file in a first format on a first device;
  - converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format; and
  - transferring said spreadsheet file to a second device.
2. (Original) The method of claim 1 wherein said first device is a computer.
3. (Original) The method of claim 2 wherein said second device is a small device.
4. (Original) The method of claim 3 wherein said small device is a PDA.
5. (Original) The method of claim 1 wherein said converting is performed by a conduit.
6. (Previously presented) The method of claim 5 wherein said converting further comprises:
  - gathering said one or more formulas by said conduit.
7. (Original) The method of claim 6 wherein said converting further comprises:
  - evaluating said formulas by said conduit.

8. (Previously presented) The method of claim 7 wherein said evaluating further comprises:

compiling code that is readable by a small device.

9. (Original) The method of claim 8 wherein said compiling further comprises:

parsing said formulas.

10. (Previously presented) A computer program product comprising:

a computer usable medium having computer readable program code embodied therein configured to evaluate a spreadsheet file, said computer program product comprising:

computer readable code configured to cause a computer to obtain said spreadsheet file in a first format;

computer readable code configured to cause a computer to convert said spreadsheet file to a second format wherein said computer readable program code configured to cause the computer to convert said spreadsheet file further comprises computer readable program code configured to cause the computer to evaluate one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format; and

computer readable code configured to cause a computer to transfer said spreadsheet file to a second device.

11. (Original) The computer program product of claim 10 wherein said first device is a computer.

12. (Original) The computer program product of claim 11 wherein said second device is a small device.

13. (Original) The computer program product of claim 12 wherein said small device is a PDA.

14. (Original) The computer program product of claim 10 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file is executed by a conduit.

15. (Previously presented) The computer program product of claim 14 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file further comprises:

computer readable program code configured to cause a computer to gather the one or more formulas by said conduit.

16. (Original) The computer program product of claim 15 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file further comprises:

computer readable program code configured to cause a computer to evaluate said formulas by said conduit.

17. (Previously presented) The computer program product of claim 16 wherein said computer readable program code configured to cause a computer to evaluate said spreadsheet file further comprises:

computer readable program code configured to cause a computer to compile code that is readable by a small device.

18. (Original) The computer program product of claim 17 wherein said computer readable program code configured to cause a computer to compile code further comprises:

computer readable program code configured to cause a computer to parse the said formulas.

**EVIDENCE APPENDIX**

None.

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**RELATED PROCEEDINGS APPENDIX**

None.

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Application No.: 09/774,354	)	Examiner: Maikhanh Nguyen
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**APPELLANTS' BRIEF ON APPEAL**

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellants submit this Brief in support of the Appeal for the above-referenced application.

**I. REAL PARTY IN INTEREST**

The real party in interest in the present appeal is the Assignee, Sun Microsystems, a U.S. corporation. The Assignment was recorded in the U.S. Patent and Trademark Office.

**II. RELATED APPEALS AND INTERFERENCES**

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### **III. STATUS OF CLAIMS**

Claims 1-18 are pending in the above-identified application. Claims 1-18 were rejected in the Final Office Action dated November 23, 2005. The rejection of claims 1-18 is appealed.

### **IV. STATUS OF AMENDMENTS**

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### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Embodiments consistent with the present invention generally relate to a method and computer program product for enabling spreadsheet programs with formula support on small devices while minimizing the amount of memory space required by the program. Conduit software gathers the needed formulas, evaluates them, and generates compiled code for the small device to understand. The evaluation is performed as part of the conversion step. See page 12, line 10 to page 13, line 3 of the patent application.

Independent claim 1 is directed to a method in a data processing system for evaluating a spreadsheet file. See page 16, line 9 to page 17, line 2 of the patent application. A spreadsheet file is obtained in a first format on a first device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. The spreadsheet file is converted to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format. See page 12, line

10 to page 13, line 3; page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Then, the spreadsheet file is transferred to a second device. See page 18, 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application.

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## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to be reviewed on Appeal are whether claims 1-4 and 10-13 are properly rejected under 35 U.S.C. § 103(a) as unpatentable over *Horie* et al. (U.S. Patent 6,487,597, hereinafter "*Horie*") in view of *Schlaflly* (U.S. Patent 5,471,612), and whether claims 5-9 and 14-18 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over *Horie* in view of *Schlaflly*, and further in view of *Pajokowski* et al. (U.S. Patent 6,718,425).

## VII. ARGUMENT

To render a claim unpatenable under 35 U.S.C. § 103(a), the Examiner bears the burden of establishing a *prima facie* case of obviousness. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972). In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. *See* MPEP 2143.03, *citing In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In the present application, the cited prior art fails to teach or suggest all of the limitations of any of pending claims 1-18. Thus, the Examiner has failed to established a *prima facie* case of obviousness for any of pending claims 1-18. Accordingly, the rejection of claims 1-18 should be reversed.

Furthermore, *prima facie* obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *See* MPEP 2143.01, *citing In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In the present application, a motivation or suggestion to combine the references as suggested has not been established. Accordingly, for this reason also, the rejection of claims 1-18 should be reversed.

### A. The Combined References Fail To Teach Every Limitation of Claims 1-18

#### 1. Horie and Schlafly Do Not Teach Evaluating While Converting

Applicants respectfully submit that the combination of *Horie* and *Schlafly* fails to teach or suggest “converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file **while**

converting said spreadsheet file to said second format' (emphasis added), as recited in claim 1.

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Nowhere does *Horie* suggest that anything other than conversion is performed during the conversion process. Thus, *Horie* also cannot be relied upon to teach or suggest that formula evaluation is performed while converting the spreadsheet file.

2. The Examiner Fails to Rebut Applicants' Arguments

In response to Applicants' arguments, the Examiner has contended that the combination of *Horie* and *Schlaflly* meets the limitations of claim 1, without citing to any portion of *Horie* or *Schlaflly* that teaches or suggests evaluating formulas **while** converting a spreadsheet file. The combined references must teach or suggest every limitation of the claims. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The combined references fail to teach the contemporaneous evaluation of formulas and conversion of a spreadsheet file, as required by the word "while" in the claim. Moreover, it would not have been obvious to perform these acts contemporaneously to solve the problem at hand, as evidenced, for example, by the long-felt need described in the patent application, as discussed below. See page 8, ll. 6-14 of the patent application.

Applicants reiterated this traversal in the Response filed February 23, 2006. However, the Examiner still failed to answer the substance of the traversal in the Advisory Action. The Examiner has repeatedly failed to establish that the combination of *Horie* or *Schlaflly* teaches or suggests "converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file **while** converting said spreadsheet file to said second format" (emphasis added).

Claim 10 is patentable over *Horie* in view of *Schlaflly* for at least the same reasons that claim 1 is patentable over *Horie* in view of *Schlaflly*. Claims 2-4 and 11-13 depend upon claims 1 and 10 respectively and are also therefore not unpatentable. The rejection of claims 5-9 and 14-18 relies on the propriety of the rejection of claims 1 and 10, respectively. As previously explained, those rejections are erroneous. Furthermore, *Pajkowski* fails to teach or suggest the

limitations absent from *Horie* and *Schlaflly*. Accordingly, the cited reference, alone or in combination, fail to teach or suggest every limitation of the claims, and *prima facie* obviousness has not been established.

B. There Is No Motivation To Combine the Cited References

1. The Proposed Combination Would Not Be Obvious

Applicants respectfully submit there is no motivation to combine *Horie* and *Schlaflly* as the Examiner has proposed to modify the references. “In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). *Horie* in no way addresses the evaluation of formulas, and *Schlaflly* in no way discusses transferring spreadsheet files to a device. Thus, there is no motivation to combine the references found within the references themselves, as one of ordinary skill in the art with the references before him would not be sufficiently enabled to combine the references as proposed by the Examiner.

Moreover, motivation would not be found in the knowledge of one of ordinary skill in the art, as evidenced by the long-felt need for methods and systems consistent with the present invention. See page 8, ll. 6-14 of the patent application. Neither *Horie* nor *Schlaflly* addresses the nature of a problem solved by embodiments consistent with the present invention, namely the reduction of memory required by a spreadsheet file when transferred to a device such as a PDA. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Thus, one of ordinary skill in the art would not be motivated to modify *Horie* with *Schlaflly* as proposed by the Examiner.



2. Desirability of the Proposed Combination is not Suggested

Still further, the Examiner contends that the motivation to combine is found in the increased speed of transmission of the spreadsheet from the personal computer to the PDA. This contention is illogical, however, as the evaluation of formulas during conversion and transmission would require more computation and add more data to the file being transmitted, thus slowing the speed of transmission. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP 2143.01 (Emphasis original), *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). *Horie* fails to provide the requisite desirability for the proposed modification.

3. *Schlaflly* Teaches Away

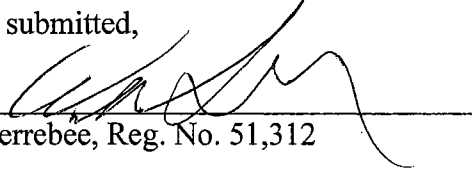
Moreover, *Schlaflly* teaches away from the limitations of claim 1. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). As previously stated, in *Schlaflly* the formula is converted or compiled before the formula is evaluated. Clearly, *Schlaflly* indicates that the conversion is performed before the formula can be evaluated. Thus, the Examiner’s combination of *Horie* and *Schlaflly* to teach conversion of a spreadsheet file while executing a formula is improper.

**VII. Conclusion**

Applicants respectfully submit that the outstanding rejections should be reversed, and that the application is in condition for allowance.

Respectfully submitted,

Dated: March 23, 2007

By:   
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**CLAIMS APPENDIX**

1. (Previously Presented) A method in a data processing system for evaluating a spreadsheet file comprising:

obtaining said spreadsheet file in a first format on a first device;  
converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format; and  
transferring said spreadsheet file to a second device.

2. (Original) The method of claim 1 wherein said first device is a computer.

3. (Original) The method of claim 2 wherein said second device is a small device.

4. (Original) The method of claim 3 wherein said small device is a PDA.

5. (Original) The method of claim 1 wherein said converting is performed by a conduit.

6. (Previously presented) The method of claim 5 wherein said converting further comprises:

gathering said one or more formulas by said conduit.

7. (Original) The method of claim 6 wherein said converting further comprises:  
evaluating said formulas by said conduit.

8. (Previously presented) The method of claim 7 wherein said evaluating further comprises:

compiling code that is readable by a small device.

9. (Original) The method of claim 8 wherein said compiling further comprises: parsing said formulas.

10. (Previously presented) A computer program product comprising:

a computer usable medium having computer readable program code embodied therein configured to evaluate a spreadsheet file, said computer program product comprising:

computer readable code configured to cause a computer to obtain said spreadsheet file in a first format;

computer readable code configured to cause a computer to convert said spreadsheet file to a second format wherein said computer readable program code configured to cause the computer to convert said spreadsheet file further comprises computer readable program code configured to cause the computer to evaluate one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format; and

computer readable code configured to cause a computer to transfer said spreadsheet file to a second device.

11. (Original) The computer program product of claim 10 wherein said first device is a computer.

12. (Original) The computer program product of claim 11 wherein said second device is a small device.

13. (Original) The computer program product of claim 12 wherein said small device is a PDA.

14. (Original) The computer program product of claim 10 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file is executed by a conduit.

15. (Previously presented) The computer program product of claim 14 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file further comprises:

computer readable program code configured to cause a computer to gather the one or more formulas by said conduit.

16. (Original) The computer program product of claim 15 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file further comprises:

computer readable program code configured to cause a computer to evaluate said formulas by said conduit.

17. (Previously presented) The computer program product of claim 16 wherein said computer readable program code configured to cause a computer to evaluate said spreadsheet file further comprises:

computer readable program code configured to cause a computer to compile code that is readable by a small device.

18. (Original) The computer program product of claim 17 wherein said computer readable program code configured to cause a computer to compile code further comprises:

computer readable program code configured to cause a computer to parse the said formulas.

**EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None.



Attorney Docket No. 30014200-1080

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Paul J. RANK et al.	)	Group Art Unit: 2176
	)	
Application No.: 09/774,354	)	Examiner: Maikhanh Nguyen
	)	
Filed: January 30, 2001	)	
	)	
For: METHOD AND APPARATUS FOR	)	
FORMULA EVALUATION IN	)	
SPREADSHEETS ON SMALL DEVICES	)	

Mail Stop Appeal Brief - Patent  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANTS' BRIEF ON APPEAL**

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellants submit this Brief in support of the Appeal for the above-referenced application.

**I. REAL PARTY IN INTEREST**

The real party in interest in the present appeal is the Assignee, Sun Microsystems, a U.S. corporation. The Assignment was recorded in the U.S. Patent and Trademark Office.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals and no related interferences.

### **III. STATUS OF CLAIMS**

Claims 1-18 are pending in the above-identified application. Claims 1-18 were rejected in the Final Office Action dated November 23, 2005. The rejection of claims 1-18 is appealed.

### **IV. STATUS OF AMENDMENTS**

A Response After Final was filed on February 23, 2005, wherein no amendments of the claims were made. An Advisory Action was mailed March 13, 2006, stating that the Response After Final had been considered but rejected because the Response did not place the application in condition for allowance.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Embodiments consistent with the present invention generally relate to a method and computer program product for enabling spreadsheet programs with formula support on small devices while minimizing the amount of memory space required by the program. Conduit software gathers the needed formulas, evaluates them, and generates compiled code for the small device to understand. The evaluation is performed as part of the conversion step. See page 12, line 10 to page 13, line 3 of the patent application.

Independent claim 1 is directed to a method in a data processing system for evaluating a spreadsheet file. See page 16, line 9 to page 17, line 2 of the patent application. A spreadsheet file is obtained in a first format on a first device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. The spreadsheet file is converted to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format. See page 12, line

10 to page 13, line 3; page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Then, the spreadsheet file is transferred to a second device. See page 18, 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application.

Independent claim 10 is directed to a computer program product comprising a computer-readable medium having computer-readable program code to evaluate a spreadsheet file. See page 16, line 9 to page 17, line 2, and page 19, lines 6-11 of the patent application. Computer-readable code causes a computer to obtain a spreadsheet file in a first format on a first device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Computer-readable code then causes the computer to convert the spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format. See page 12, line 10 to page 13, line 3; page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application. Computer-readable code then causes the computer to transfer the spreadsheet file to a second device. See page 18, line 10 to page 19, line 2; Figs. 3A1 and 3A2 of the patent application.

## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to be reviewed on Appeal are whether claims 1-4 and 10-13 are properly rejected under 35 U.S.C. § 103(a) as unpatentable over *Horie* et al. (U.S. Patent 6,487,597, hereinafter "*Horie*") in view of *Schlaflly* (U.S. Patent 5,471,612), and whether claims 5-9 and 14-18 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over *Horie* in view of *Schlaflly*, and further in view of *Pajokowski* et al. (U.S. Patent 6,718,425).

## VII. ARGUMENT

To render a claim unpatenable under 35 U.S.C. § 103(a), the Examiner bears the burden of establishing a *prima facie* case of obviousness. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972). In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. *See* MPEP 2143.03, *citing In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In the present application, the cited prior art fails to teach or suggest all of the limitations of any of pending claims 1-18. Thus, the Examiner has failed to established a *prima facie* case of obviousness for any of pending claims 1-18. Accordingly, the rejection of claims 1-18 should be reversed.

Furthermore, *prima facie* obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *See* MPEP 2143.01, *citing In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In the present application, a motivation or suggestion to combine the references as suggested has not been established. Accordingly, for this reason also, the rejection of claims 1-18 should be reversed.

### A. The Combined References Fail To Teach Every Limitation of Claims 1-18

#### 1. *Horie* and *Schlaflly* Do Not Teach Evaluating While Converting

Applicants respectfully submit that the combination of *Horie* and *Schlaflly* fails to teach or suggest “converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file **while**

converting said spreadsheet file to said second format' (emphasis added), as recited in claim 1.

Claim 10 recites a similar limitation. Applicants note the *Schlaflly* specifically teaches away from this limitation. *Schlaflly* states:

Before meaningful results of a given spreadsheet may be presented to a user, the formulas of a given spreadsheet must first be evaluated or recalculated. "Recalculation" is the process by which a spreadsheet's cells, particularly formula-storing ones, are evaluated to express values. Different recalculation orders are well known including, for instance, natural, rowwise, and columnwise. Each will be reviewed in turn.

See column 2, lines 60-67 of *Schlaflly*. *Schlaflly* further states:

The present invention comprises an electronic spreadsheet system having a preferred interface and methods for compiling spreadsheet formulas into native machine instructions. The system includes a Formula Evaluator for compiling a given spreadsheet formula into a machine language sequence to be executed by the target processor/coprocessor. In this manner, the system may perform recalculation of spreadsheet formulas in substantially less time than is required by prior art, token-based interpreter systems.

See column 4, lines 1-10 of *Schlaflly*. Thus, *Schlaflly* indicates that formula evaluation is performed after compilation or conversion. By converting the formula prior to evaluation, evaluation or recalculation may be performed more quickly. Accordingly, *Schlaflly* does not teach or suggest converting while evaluating.

Moreover, *Horie* also fails to teach or suggest the "while" limitation. The Examiner relies on column 7, lines 27-30, which state:

the user can easily convert a file form to a new one (for example, from a word processor data containing format information into text data containing no such information) and transmit it to the PDA.

Nowhere does *Horie* suggest that anything other than conversion is performed during the conversion process. Thus, *Horie* also cannot be relied upon to teach or suggest that formula evaluation is performed while converting the spreadsheet file.

2. The Examiner Fails to Rebut Applicants' Arguments

In response to Applicants' arguments, the Examiner has contended that the combination of *Horie* and *Schlaflly* meets the limitations of claim 1, without citing to any portion of *Horie* or *Schlaflly* that teaches or suggests evaluating formulas **while** converting a spreadsheet file. The combined references must teach or suggest every limitation of the claims. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The combined references fail to teach the contemporaneous evaluation of formulas and conversion of a spreadsheet file, as required by the word "while" in the claim. Moreover, it would not have been obvious to perform these acts contemporaneously to solve the problem at hand, as evidenced, for example, by the long-felt need described in the patent application, as discussed below. See page 8, ll. 6-14 of the patent application.

Applicants reiterated this traversal in the Response filed February 23, 2006. However, the Examiner still failed to answer the substance of the traversal in the Advisory Action. The Examiner has repeatedly failed to establish that the combination of *Horie* or *Schlaflly* teaches or suggests "converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file **while** converting said spreadsheet file to said second format" (emphasis added).

Claim 10 is patentable over *Horie* in view of *Schlaflly* for at least the same reasons that claim 1 is patentable over *Horie* in view of *Schlaflly*. Claims 2-4 and 11-13 depend upon claims 1 and 10 respectively and are also therefore not unpatentable. The rejection of claims 5-9 and 14-18 relies on the propriety of the rejection of claims 1 and 10, respectively. As previously explained, those rejections are erroneous. Furthermore, *Pajkowski* fails to teach or suggest the

limitations absent from *Horie* and *Schlaflly*. Accordingly, the cited reference, alone or in combination, fail to teach or suggest every limitation of the claims, and *prima facie* obviousness has not been established.

B. There Is No Motivation To Combine the Cited References

1. The Proposed Combination Would Not Be Obvious

Applicants respectfully submit there is no motivation to combine *Horie* and *Schlaflly* as the Examiner has proposed to modify the references. “In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). *Horie* in no way addresses the evaluation of formulas, and *Schlaflly* in no way discusses transferring spreadsheet files to a device. Thus, there is no motivation to combine the references found within the references themselves, as one of ordinary skill in the art with the references before him would not be sufficiently enabled to combine the references as proposed by the Examiner.

Moreover, motivation would not be found in the knowledge of one of ordinary skill in the art, as evidenced by the long-felt need for methods and systems consistent with the present invention. See page 8, ll. 6-14 of the patent application. Neither *Horie* nor *Schlaflly* addresses the nature of a problem solved by embodiments consistent with the present invention, namely the reduction of memory required by a spreadsheet file when transferred to a device such as a PDA. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Thus, one of ordinary skill in the art would not be motivated to modify *Horie* with *Schlaflly* as proposed by the Examiner.

2. Desirability of the Proposed Combination is not Suggested

Still further, the Examiner contends that the motivation to combine is found in the increased speed of transmission of the spreadsheet from the personal computer to the PDA. This contention is illogical, however, as the evaluation of formulas during conversion and transmission would require more computation and add more data to the file being transmitted, thus slowing the speed of transmission. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP 2143.01 (Emphasis original), *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). *Horie* fails to provide the requisite desirability for the proposed modification.

3. *Schlaflly* Teaches Away

Moreover, *Schlaflly* teaches away from the limitations of claim 1. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). As previously stated, in *Schlaflly* the formula is converted or compiled before the formula is evaluated. Clearly, *Schlaflly* indicates that the conversion is performed before the formula can be evaluated. Thus, the Examiner’s combination of *Horie* and *Schlaflly* to teach conversion of a spreadsheet file while executing a formula is improper.

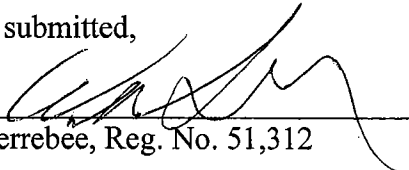


**VII. Conclusion**

Applicants respectfully submit that the outstanding rejections should be reversed, and that the application is in condition for allowance.

Respectfully submitted,

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**CLAIMS APPENDIX**

1. (Previously Presented) A method in a data processing system for evaluating a spreadsheet file comprising:

obtaining said spreadsheet file in a first format on a first device;

converting said spreadsheet file to a second format wherein said converting further comprises evaluating one or more formulas associated with said spreadsheet file while converting said spreadsheet file to said second format; and

transferring said spreadsheet file to a second device.

2. (Original) The method of claim 1 wherein said first device is a computer.

3. (Original) The method of claim 2 wherein said second device is a small device.

4. (Original) The method of claim 3 wherein said small device is a PDA.

5. (Original) The method of claim 1 wherein said converting is performed by a conduit.

6. (Previously presented) The method of claim 5 wherein said converting further comprises:

gathering said one or more formulas by said conduit.

7. (Original) The method of claim 6 wherein said converting further comprises:  
evaluating said formulas by said conduit.

8. (Previously presented) The method of claim 7 wherein said evaluating further comprises:

compiling code that is readable by a small device.

9. (Original) The method of claim 8 wherein said compiling further comprises:  
parsing said formulas.

10. (Previously presented) A computer program product comprising:  
a computer usable medium having computer readable program code embodied therein  
configured to evaluate a spreadsheet file, said computer program product comprising:  
computer readable code configured to cause a computer to obtain said spreadsheet file in  
a first format;

computer readable code configured to cause a computer to convert said spreadsheet file  
to a second format wherein said computer readable program code configured to cause the  
computer to convert said spreadsheet file further comprises computer readable program code  
configured to cause the computer to evaluate one or more formulas associated with said  
spreadsheet file while converting said spreadsheet file to said second format; and

computer readable code configured to cause a computer to transfer said spreadsheet file  
to a second device.

11. (Original) The computer program product of claim 10 wherein said first device is  
a computer.

12. (Original) The computer program product of claim 11 wherein said second device is a small device.

13. (Original) The computer program product of claim 12 wherein said small device is a PDA.

14. (Original) The computer program product of claim 10 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file is executed by a conduit.

15. (Previously presented) The computer program product of claim 14 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file further comprises:

computer readable program code configured to cause a computer to gather the one or more formulas by said conduit.

16. (Original) The computer program product of claim 15 wherein said computer readable program code configured to cause a computer to convert said spreadsheet file further comprises:

computer readable program code configured to cause a computer to evaluate said formulas by said conduit.

17. (Previously presented) The computer program product of claim 16 wherein said computer readable program code configured to cause a computer to evaluate said spreadsheet file further comprises:

computer readable program code configured to cause a computer to compile code that is readable by a small device.

18. (Original) The computer program product of claim 17 wherein said computer readable program code configured to cause a computer to compile code further comprises:

computer readable program code configured to cause a computer to parse the said formulas.

**EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None.